

Job Attachment Patterns of Men and Women: The Role of Promotion Expectations and Experience.

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Abstract

The National Longitudinal Survey of Youth (NLSY) asks a series of questions relating to an individual's job satisfaction. One of these questions elicits respondents' expectations for promotion on their current job. We explore gender differences in job turnover behavior in response to promotion expectations. We expect that women, early in their career would be less sensitive to promotion opportunities (or lack thereof) than comparable men since they must first signal their attachment to the labor market. This rationale also suggests that as women gain experience, they should exhibit job attachment patterns similar to those of men. Using the 1979 National Longitudinal Survey of Youth (NLSY), we find that men and women differ in their response to promotion expectations. Specifically, we find that early in their career women with low promotion expectations are more likely to stay on a job than corresponding men. We also find that this difference diminishes with experience.

Theme: J7, J16, J42

Keywords: Turnover, Promotions

JEL Classification: J0, J7, J63

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1 Introduction

In documenting the pattern of lifetime jobs in the U.S. using data from the 1968-1978 period, Hall(1982) found that on average, women's jobs were of substantially shorter duration relative to men's jobs. According to Hall, this higher job turnover for women was a consequence of the long stretches of time they spent out of the labor force. Researchers have studied the implications of these gender differences in turnover behavior on various labor market outcomes. Ureta (1995) examined the effect of non-employment spells on wage growth, by studying the timing and frequency of non-work spells for a sample of young, white workers drawn from the National Longitudinal Surveys. Her estimates suggest that 12% of the male-female wage gap can be explained by women's intermittent employment spells.

One channel through which gender differences in job turnover translate into the gender wage gap is through differential rates of promotion for men and women (Lazear and Rosen, 1990); some contend that women face a 'glass ceiling' that prevents their upward mobility in internal labor markets (Gjerde, 2002). According to this theory, since training workers is a costly activity, firms are only willing to invest in those workers from whom they expect to recoup the costs of training. Given that the expected time horizon to recover these costs is shorter for women, firms are unwilling to train their women workers. And since training is invariably a prerequisite for promotion, promotion rates for women tend to be smaller than those for men. These differences in promotion rates then translate into a gender wage-gap.¹

A significant increase in the labor force participation of women over the past few decades has motivated researchers to re-examine job turnover behavior by men and women. There is evidence suggesting that more recent cohorts of women are as concerned about their careers as men, have a higher propensity to stay on their jobs and are exhibiting a strong attachment to the labor market.² We would expect firms to treat these women - the 'stayers' - no differently from men. However, there are still considerable gender differences in labor-market behavior. For example, a substantial body of research relates early career wage growth to intense job-shopping (Mincer (1986) and Topel and Ward (1992)). Keith and McWilliams (1999) examine gender differences in job-search behavior for a sample of 18-27 year old workers in the NLSY. Their findings suggest that women are less likely to engage in on-the-job search and therefore more likely to stay on their job, relative to men. However, when they disaggregate separation rates by the type of separation, they find that women are twice as likely to quit for a family-related reason but experience substantially less *involuntary* turnover compared to men.

Thus, women workers are still a heterogenous group comprising both 'stayers' and 'quitters', with higher average turnover rates than men. If firms cannot distinguish between the two types of women workers based on observables, statistical discrimination would still result in lower promotion rates for women and a persistence of the wage gap. If, on the other hand, the stayers could

¹Wages usually grow with promotions; McCue's(1996) estimates suggest that between 9%-18% of wage growth is due to promotions.

²See Light and Ureta(1992), Prisinzano (2004) and references therein.

successfully signal their intentions to stay in the labor force and separate themselves from the quitters, they could overcome internal labor market discrimination.

Prisinzano (2004) estimated a bivariate probit model of job-stays and promotions for men and women. His results indicate that the error terms between the job-stay equation and the promotions equations are correlated for men, suggesting that the unobservables affecting the stay decision are correlated with those affecting whether they receive a promotion or not. In contrast, the hypothesis that the estimated correlation between the error terms in the two equations for women is equal to zero cannot be rejected, implying that whether women receive a promotion offer or not is uncorrelated with their job-stay decisions. This result is the motivation for the current paper.

It is our view that women who are concerned about their careers are using job attachment as a signal to indicate their attachment to the labor force. We expect women with little or no job market experience to have lower job turnover rates compared to men of similar experience, all else equal. Therefore, during this period, we expect women to exhibit less sensitivity to expectations of promotion, relative to men. This rationale also suggests that once women have gained adequate labor market experience and revealed themselves as stayers, their job attachment patterns should respond more closely to their expectations of promotions. Hence, we expect women with adequate job market experience to reveal job attachment patterns similar to those of men.

Accordingly, we use a longitudinal dataset to study how the expectation of promotion affects men's and women's decision to stay on a job and whether this relative pattern varies with the amount of labor market experience. The data contains information on workers' perceived chances of promotion in their current job. We expect workers who are concerned about their careers to be sensitive to the potential for career growth in their firms. We examine how turnover behavior responds to this subjective likelihood of promotion and how this response differs by gender and experience level.

Our results suggest that individuals with low expectations of promotion are less likely to stay on their jobs relative to those with high expectations of promotion. We also find evidence that women are more likely than men to stay on a job all else equal. Furthermore, women with low promotion expectations are more likely than comparable men to stay on a job and this difference is more pronounced early in careers. However, this difference diminishes with experience in the labor market.

The rest of the paper is organized as follows: section 2 gives a description of our data, the variables used in our analysis and some descriptives for our sample. In section 3, we describe the empirical models we use in our estimation, in section 4 we discuss the results and present our conclusions in section 5.

2 Data and Descriptives

We use data from the National Longitudinal Survey of Youth (NLSY) for the following survey years: 1979-83, 1996, 1998 and 2000. We restricted our sample to those who exhibited a reasonable attachment to the labor market. We eliminated respondents who worked for less than 15 weeks per

year or less than 20 hours per week in any year. We also eliminated respondents who were either self-employed, working in a farming occupation or industry, or in the armed forces. This restriction removes those individuals that face considerably different job and promotion structures than the typical worker.

The information on job changes and the subjective perception of promotion possibilities on the current job are of particular interest for the present study. Accordingly, we identify the respondent as a ‘job-stayer’ in a particular year if he or she reported that the main job that year was also the main job in the previous year. In the 1979 through 1982 surveys, the NLSY includes the respondent’s assessment of whether the chances for promotion in the current job are good. The survey question is in the form of a statement by the interviewer that the chances of promotion in the current job are good. The respondent is required to pick from one of the following options: 1. Not true at all; 2. Not too true; 3. Somewhat true and 4. Very true. In the 1996 and 1998 surveys, a similar question is asked as follows: “Do you believe it is possible for you to get a promotion with this employer in the next two years?”, and the respondent replied with a yes/no.

One problem in comparing these questions is that in the 1979-82 surveys, the question does not specify a time horizon while in the 1996 and 1998, the scope of the question is limited to two years. However, we believe that the respondents interpreted the question as referring to a short time horizon in the 1979-82 surveys, especially given that they were all between 15 and 25 years old. We therefore combine the first two categories in the 1979-82 survey responses - Not true at all and Not too true - into one, and label this as “Low chances of promotion”, and combine the other two categories - Somewhat true and Very true - into the “High chances of promotion category. In the 1996 and 1998 surveys, if the response to the promotion question was No, this was categorized as “Low chances of promotion” and if it was Yes, it was categorized as “High chances of promotion.” This way, we construct a comparable measure of subjective perception of promotion chances on the current job over all the years in the sample.

Tables 1 and 2 present the fraction of job-stayers and job-movers among men and women for the two time periods, categorized by their self-perceived chances of promotion. In the 1979-82 period, among workers who feel they have little or no chance of promotion in their current job, a significantly larger fraction of women workers stayed on their jobs. By contrast, a much higher fraction of men stay on in jobs in which they think that the likelihood of promotion is very high, relative to women. Among the job-movers, there’s no discernible pattern among women while a significant fraction among men, nearly 60%, move jobs even when they think they have good chances of promotion. We observe the same pattern in the 1996-1998 period.

The summary statistics for our sample are presented in table 3. Women constituted less than half the sample, as did non-whites. Although we do not see too many differences between men and women in terms of the marital status variables, on average, women had more children. Women were also slightly younger and had about an extra half-year of education. This translated into a lower average level of potential experience for women. As expected, women had lower mean wages, compared to men. However, a higher fraction of women stayed on their jobs from one year to the next compared to men, despite a substantially higher fraction of women reported low chances of

promotion in their current jobs.

3 Model Specification

In the present paper, we examine the likelihood of an individual remaining on a job. It is possible to estimate this decision using a simple probit model of the following form:

$$y_i = X\beta + \epsilon_i \quad (1)$$

where $y = 1$ if the individual stayed on the current job and $y = 0$ if she did not stay on the job. X is a set of covariates, β is a vector of parameters to be estimated, and ϵ is assumed to have a standard normal distribution. The set of covariates includes characteristics pertaining to the individual and her job. This model is appealing because it is easy to implement and interpret. However, the model does not take advantage of the panel nature of the data. We can incorporate the longitudinal structure of the data into the probit model and account for omitted variable bias by estimating a random-effects specification of equation 1.

The specification used in this paper follows the model proposed by Guilkey and Murphy (1993).³ The model is as follows:

$$y_{it}^* = X_{it}\beta + \mu_i + v_{it} \quad (2)$$

where X_{it} is a set of covariates for individual i at time t and β are parameters to be estimated. μ_i and v_{it} are independent random variables with μ_i characterizing individual i and following a normal distribution with mean 0 and variance σ_μ^2 while v_{it} is a random disturbance distributed as $N(0, \sigma_v^2)$. Given these conditions, we have the following:

$$E(\mu_i + v_{it}, \mu_i + v_{it}) = \sigma_\mu^2 + \sigma_v^2 \quad (3)$$

and

$$Corr(\mu_i + v_{it}, \mu_i + v_{is}) = \rho = \frac{\sigma_\mu^2}{\sigma_\mu^2 + \sigma_v^2} \quad (4)$$

Following from a simple probit, we observe the following:

$$\begin{aligned} y_{it} &= 1 \text{ if } y_{it}^* > 0 \\ y_{it} &= 0 \text{ if } y_{it}^* \leq 0. \end{aligned} \quad (5)$$

The likelihood function is then:

$$\begin{aligned} L = \prod_{i=1}^N \left\{ \int_{-\infty}^{\infty} \prod_{t=1}^T [1 - \Phi(x_{it} \frac{\beta}{\sigma_v} + \sqrt{\frac{\rho}{1-\rho}} \frac{\mu}{\sigma_\mu})]^{1-y_{it}} \right. \\ \left. \times [\Phi(x_{it} \frac{\beta}{\sigma_v} + \sqrt{\frac{\rho}{1-\rho}} \frac{\mu}{\sigma_\mu})]^{y_{it}} \phi(\frac{\mu}{\sigma_\mu}) d(\frac{\mu}{\sigma_\mu}) \right\} \end{aligned} \quad (6)$$

³Heckman and Willis (1976) and Chamberlain (1980) both present a similar model. Hsiao (1986) gives a useful discussion of the literature. Butler and Moffitt (1982) describe a procedure to calculate the likelihood function.

where Φ represents the standard normal distribution, N is the number of individuals, and T is the number of observations for individual i . X_{it} is a set of covariates for individual i at time t and β , μ , and ρ are parameters to be estimated.⁴

In order to capture the differential effects of gender, promotion expectations, and experience on the probability of staying on a job, we first examine how the probability of staying on a job differs by promotion expectations. Any difference in the probability is likely due to simple concerns regarding career prospects. That is, individuals may be less likely to remain on a job if they do not expect to be promoted. Second, we examine how these concerns differ by gender. If, on average, women have different expectations about the duration of their career, they may respond differently to promotion expectations compared to men. We can then estimate gender differentials in job turnover due to promotion expectations as follows:

$$\begin{aligned} \Delta^2 = & (Pr(y_{it} = 1)_F^L - Pr(y_{it} = 1)_F^H) \\ & - (Pr(y_{it} = 1)_M^L - Pr(y_{it} = 1)_M^H) \end{aligned} \quad (7)$$

where $Pr(y_{it} = 1)$ represents the probability of staying on a job, the superscripts L and H represent individuals who have either low or high expectations of promotion, and the subscripts F and M represent females and males, respectively. The equation is represented in the probit framework by:

$$Pr(y_{it} = 1) = z_{it}\gamma + \delta_1 L + \delta_2 F + \delta_3(L * F) + \epsilon_{it} \quad (8)$$

where z_{it} is a set of covariates and γ is the corresponding set of parameters to be estimated. L is a dummy variable for an individual who has low expectations for promotion and F is a dummy variable for females. δ_1 and δ_2 are the associated coefficients to be estimated. δ_3 is the coefficient that identifies gender differences in turnover in response to promotion expectations, as expressed in 7. Lastly, we examine whether differences in the probability of staying on a job given promotion expectations and labor market experience differ by gender. Following the form above, we have:

$$\begin{aligned} \Delta^3 = & [(Pr(y_{it} = 1)_F^L - Pr(y_{it} = 1)_F^H) - (Pr(y_{it} = 1)_M^L - Pr(y_{it} = 1)_M^H)]_I \\ & - [(Pr(y_{it} = 1)_F^L - Pr(y_{it} = 1)_F^H) - (Pr(y_{it} = 1)_M^L - Pr(y_{it} = 1)_M^H)]_E \end{aligned} \quad (9)$$

where the subscripts I and E represent individuals who are inexperienced and experienced and all other notation is defined as above. However, rather than assign an indicator for ‘inexperience,’ we use a continuous measure of experience. Since a worker’s actual labor market experience is endogenous with respect to our outcome variable, we use the individual’s potential experience to proxy for actual experience in the labor market. This difference is incorporated in the probit

⁴A pooled probit will provide consistent estimates of $\frac{\beta}{\sigma_\epsilon}$ with incorrect standard errors. However, these estimates will equal the random effects estimates only if $\sigma_\mu^2 = 0$. If $\sigma_\mu^2 \neq 0$ then the preferred estimation method is the variance-components model of equation 6.

framework as follows:

$$\begin{aligned}
Pr(y_{it} = 1) = & z_{it}\gamma + \delta_1 L + \delta_2 F + \delta_3(L * F) + \delta_4 E + \delta_5 E^2 + \\
& \delta_6(L * E) + \delta_7(L * E^2) + \delta_8(F * E) + \delta_9(F * E^2) + \\
& \delta_{10}(L * F * E) + \delta_{11}(L * F * E^2) + \epsilon_{it}
\end{aligned}
\tag{10}$$

where E and E^2 are potential experience and its square respectively while δ_4 and δ_5 are the associated coefficients.

The above specification allows for comparisons across different groups. We are interested in the following differences. First, we are concerned with the difference in the likelihood of staying on the job across gender given low promotion expectations and the same difference given high promotion expectations. The former difference is represented by $\delta_2 + \delta_3 + \delta_8 + \delta_9 + \delta_{10} + \delta_{11}$ while the latter difference is represented by $\delta_2 + \delta_8 + \delta_9$. Second, we are interested in the likelihood of staying on a job across promotion expectations given gender. For men, this difference is represented by $\delta_1 + \delta_6 + \delta_7$. The same difference for women is represented by $\delta_1 + \delta_3 + \delta_6 + \delta_7 + \delta_{10} + \delta_{11}$. Lastly, we are interested in how the difference in the likelihood of staying for men with low and high promotion expectations differs from the analogous difference for women after controlling for experience level. This difference is represented by $\delta_3 + \delta_{10} + \delta_{11}$.

4 Estimates

The results from the random-effects probit models are presented in table 4 . The estimate of the correlation between the decision to stay on a job in year t and the same decision in year $t + 1$, denoted by ρ , is positive and significant. This result suggests that the random effects probit is the preferred estimation.⁵ The implication of the positive sign on the correlation is that individuals who stay on their job in year t are more likely to stay on their job in year $t + 1$; in other words, certain individuals may be ‘stayers’ while others are ‘non-stayers.’

4.1 Basic Results

An important determinant of staying on a job is changes in marital status. We define changes in marital status for an individual as follows: stayed single from year t to $t + 1$, remained married from year t to $t + 1$, got married between year t and $t + 1$, or went from being married to single between year t and $t + 1$. Our results indicate that individuals who remain married or who get married are more likely to stay on a job than individuals who remained single, all else equal. The former group is 35% more likely to remain on a job while the latter group is 23.5% more likely to remain on a job.⁶ The coefficient on becoming single between two time periods is positive and

⁵In general, there is little difference between the pooled estimates and the random effects estimates. However, the estimate of ρ is significantly different from zero in each model estimated. Given this fact, we report only the results of the random effects probits.

⁶The predicted probability of remaining on a job at the mean levels of all continuous variables and each dummy variable set to 0 is .5118.

significant. However, the marginal effect is considerably smaller than the effects associated with marriage (14%).

Presumably, two important considerations that affect job turnover are the wage and the potential for promotion within the firm. The former reflects the cost to the individual of leaving the job. The coefficient on the log of the hourly wage is positive and significant. The marginal effect associated with the coefficient is sizable at 28.76%. This result is consistent with the notion that the higher the wage, the higher the cost to the individual of leaving the job. Expectations about getting a promotion are likely to be important to those individuals who are concerned about a career and the associated benefits. As such, we expect individuals with low promotion expectations to be less likely to stay on the job. Our estimate accords with this notion; individuals who have low expectations of promotion on their jobs are 17% less likely to stay on their jobs, relative to those with good prospects for promotion.

The effect of potential experience on job turnover seems counter-intuitive; search theory predicts that job turnover will be high at low levels of experience as workers search for a good ‘match’. Once good job matches are made, turnover is expected to decline. Thus, we would expect the coefficient on the linear experience term to be positive and the one on the quadratic term to be negative. Our results suggest the opposite pattern. A possible explanation for this pattern is that our sample comprises workers who were still recent entrants into the labor market and were constantly changing jobs in search of a good match. It is important to note that the marginal effect associated with potential experience is negligible.⁷

The coefficient on the gender variable is of particular interest to the present study. Recent studies have found that women are more likely than men to stay at jobs.⁸ Our result is consistent with this finding. The coefficient on the female dummy variable is significant and positive. It suggests that women are 12% more likely than men to stay on a job all else equal.

4.2 Gender-Promotion Expectation Comparisons

Column 3 of table 4 presents the estimates of gender differences in turnover behavior, given promotion expectations. The results from the basic specification presented in column 2 of table 4 suggest that women are 12% more likely to remain on a job than men all else equal. The unconditional probabilities of staying on a job are very close: 55.5% for men and 56.9% for women. A reasonable explanation for the estimated difference is that women may face discrimination in hiring practices. In other words, women may face different offer functions compared to men. As such, women may hold onto jobs longer because their returns to job search are lower than those faced by men (Keith and McWilliams, 1999).

If individuals are concerned with career ‘growth’, promotion expectations are likely to influence their turnover decision. The basic specification supports this notion. That is, individuals with low promotion expectations are less likely to stay on a job. The presumption is that they will incur

⁷The marginal effect of potential experience is calculated as the mean of the marginal effects in the sample.

⁸For example, Prisinzano (2004).

the costs of leaving a job in order to move to a job with more promotion potential. It is also possible that individuals who have low promotion expectations recognize they are not productive at the job. In this case, individuals may leave in order to find a job at which they are productive. The estimation presented here does not distinguish between these possibilities but as presented in the previous section, individuals with low promotion expectations are 15% less likely to stay on a job all else equal. Considering the magnitude of the marginal effect, it appears that promotion expectations are an important determinant of staying on a job.

The coefficient on the interaction between female and low promotion expectations indicates how gender differences in the probability of staying on a job vary with promotion expectations. Our results suggest that this interaction effect is insignificant at conventional levels. This implies that women are more likely to stay on jobs than men regardless of the promotion expectations. However, if women do need to signal attachment to the labor market, it is likely that women with low levels of experience will behave differently from men with low levels of experience but the behavior of women with high levels of experience will be similar to that of men with high levels of experience. In order to explore this possibility, we estimated the specification presented in equation 10.

4.3 Gender-Promotion Expectation-Experience Comparisons

The results of the estimation based on equation 10 are presented in column 6 of table 4. In the case of the control variables, the results are similar to the results of the previous specifications. In the previous estimation, we found that the net effect of potential experience decreased the likelihood of staying on a job. In the current specification, we also find this result but the inclusion of interaction terms changes the interpretation.⁹ The net effect of potential experience differs by gender, promotion expectation, and gender-promotion expectation group. Our results suggest that as potential experience increases, the likelihood of staying on a job for men with high promotion expectations decreases.¹⁰

In the previous specifications, we also found that individuals with low promotion expectations are less likely to stay on a job. In the current specification, we see a different result for men. The marginal effect associated with the coefficient on low promotion expectations also accounts for the interaction between this variable and the potential experience variables. The net marginal effect is .0004. This result suggests that men with low promotion expectations are .03% more likely to stay on a job than men with high promotion expectations.¹¹ Even though this effect is small, it suggests a negative selection of men into long tenure. That is, men who have low promotion expectations on the current job are also less likely to find comparable jobs in the labor market and therefore,

⁹The set of coefficients is Female, Low, Low*Female, Potential Experience, the square of Potential Experience, Potential Experience*Low, (Potential Experience)²*Low, Potential Experience*Female, (Potential Experience)²*Female, Potential Experience*Low*Female, and (Potential Experience)²*Low*Female. The χ^2 statistic for joint significance of the full set is 192.71 and its associated p -value is .0000.

¹⁰The χ^2 statistic for joint significance of the coefficients on the potential experience variables is 21.99 and its associated p -value is .0000.

¹¹The χ^2 statistic for joint significance of the coefficient on low promotion expectations and the interactions with the potential experience variables is 87.29 and its associated p -value is .0000.

stay on the current job.

In the specification based on 8, we found that women were 12% more likely than men to stay on a job all else equal. In the current specification, we also find that women are more likely to stay on a job than men. The marginal effect associated with women also takes into account the interaction of the potential experience variables and the female dummy variable. This effect suggests that women who have high promotion expectations are 16.5% more likely than men with high promotion expectations to stay on a job.¹² A possible explanation for this result is that women face statistical discrimination in the labor market. Women must signal attachment to the labor market in order to receive promotions (and the likely wage increases). If attachment to the labor market is observed noisily from outside a firm, women will stay on current jobs longer than men all else equal. This effect is likely to be stronger if they expect to be promoted in their current firm.

We also find that women with low promotion expectations are less likely to stay on a job than women with high promotion expectations. The marginal effect associated with being a women with low promotion expectations takes into account the coefficients on the female and low promotion expectations variables as well as each of the included interactions. The results suggest that women with low promotion expectations are 13.8% less likely to stay on a job than women with high promotion expectations.¹³ Contrary to the result for men, it appears that there is *positive* selection of women into long tenure.

Given the present specification, it is possible to compare across gender and promotion expectations. A useful comparison is women to men given low promotion expectations. The marginal effect is .0122 at the mean experience level and suggests that women with low promotion expectations are 2.5% more likely to stay on job than their male counterparts.¹⁴ This difference in the likelihood of staying across gender increases if we consider men and women with a potential experience level that is one standard deviation below the mean. Women with low promotion expectations and ‘low’ potential experience are 16.6% more likely than comparable men to stay on a job. This result is of particular interest in our study.

Our hypothesis is that early in their careers women are likely to respond to promotion expectations differently than men. Specifically, we expect women early in their careers, to stay on in jobs where they have low promotion expectations more often than men. The reason for this difference is that women early in their careers must signal an attachment to the labor market. As such, ‘job-shopping’ by women is a negative signal regarding labor force attachment. This suggests that women who have low promotion expectations and are inexperienced are more likely to stay on a job than their male counterparts.

Later in the career, the difference in the likelihood of staying on a job between men and women with low promotion expectations diminishes. For individuals with a potential experience level

¹²The χ^2 statistic for joint significance of the coefficients on female and the interactions with the potential experience variables is 22.61 and its associated p -value is .0000.

¹³The χ^2 statistic for joint significance of the coefficients on low and the interactions with female and potential experience variables is 131.82 and its associated p -value is .0000.

¹⁴The χ^2 statistic for joint significance of the coefficients on female and the female-potential experience and female-low interactions is 43.15 and its associated p -value is .0000.

that is one standard deviation above the mean, women with low promotion expectations are only 12.8% more likely to remain on a job than comparable men. Our hypothesis is that men and women’s behavior in response to promotion expectations should be indistinguishable at high levels of experience. Even though there is still a difference, this result supports this notion.¹⁵

5 Conclusions

Labor economists have explained the male-female wage differential as a consequence of women’s historic lack of attachment to the labor force. However, with a rapid rise in the female labor force participation rate over the last few decades, the career profiles of recent cohorts of women workers has undergone significant changes. Studies indicate that women are now more likely to stay on their jobs compared to men of similar characteristics. In this paper, we examine how job turnover relates to concerns regarding career prospects. We expect to see job turnover when promotion opportunities on the job are low. Accordingly, we study the relationship between individuals’ expectations of promotion on their jobs and their turnover behavior. We examine how this relationship varies between men and women and with labor market experience. It is our hypothesis that early on in their careers, women who are strongly committed to a career are more likely to stay on their jobs, regardless of promotion opportunities, in a bid to signal their commitment to current and potential employers. However, once women have acquired adequate labor market experience and their commitment to the labor force is no longer in question, we predict that their turnover behavior will be more responsive to career opportunities and will be similar to that of men.

We use longitudinal data for men and women from the NLSY to test our predictions. In order to exploit the longitudinal nature of the data, we use a random-effects probit model to estimate the probability that an individual will stay on a job. We estimate three models: a basic model that includes indicator variables for female and low promotion expectations; a model that includes an interaction between female and low promotion expectations; and a model that includes interactions between female, low promotion expectations, and potential experience.

The results from the basic specification suggest that as expected, individuals with low expectations of promotion are less likely to stay on their jobs than those with high expectations of promotion. This result is repeated in the model that allows for differences in the effect of low promotion expectations across gender. In this model, we also find that the tendency of women to be more likely than men to stay on a job does not vary with promotion expectations. In the third model, we find a different result. We find that men with low promotion expectations are slightly

¹⁵As noted in section 2, the promotion expectations question in the 1979-83 surveys had four possible responses while the corresponding question in the 1996-98 surveys had only two possible responses. In pooling the data, it was necessary to collapse the four response categories from the earlier period into two categories. To ensure that this restriction is not affecting our results, we estimated all specifications for the 1979-84 and the 1996-2000 periods separately. The results for the latter period are similar to those for the pooled sample. In estimating the specifications for the earlier period, we used the detailed response information. While the results for gender-promotion expectations specification (as in section 4.2) do not change significantly, the relevant estimates for the specification in section 4.3 are insignificant. However, they have the same signs as in the pooled estimation. The results are not reported here.

more likely to remain on jobs than men with high promotion expectations all else equal. This result suggests that there is some negative selection of men into long tenured jobs. Alternatively, we find that women with low promotion expectations are *less* likely to remain on jobs than women with high promotion expectations. This result suggests that there is positive selection of women into long tenure.

We also find that the difference across gender in the likelihood of staying on a job varies by labor market experience. By evaluating the marginal effect of low promotion expectations at different levels of potential experience we find some support for our hypothesis that early in their career, women are more likely to stay on a job despite having low promotion expectations since they need to signal their attachment to the labor force. Later in the career, women should not differ from men in terms of their response to promotion expectations. Our results suggest that while women are still more likely to remain on their job in the face of low promotion expectations later in the career, the difference is smaller than the difference early in the career.

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Table 1: Self-Reported Promotion Chances at Job
By Mobility: 1979-82

| Women | | | | |
|-----------------|-------------|------------------|-------------|------------------|
| <i>Response</i> | Job Stays | | No Stays | |
| | <i>Mean</i> | <i>Std. Dev.</i> | <i>Mean</i> | <i>Std. Dev.</i> |
| Not True at All | .1324 | .339 | .2484 | .4322 |
| Not True | .2295 | .4206 | .262 | .4398 |
| True | .3411 | .4742 | .2868 | .4524 |
| Very True | .297 | .4571 | .2027 | .4021 |
| Observations | 1586 | | 1771 | |
| Men | | | | |
| <i>Response</i> | Job Stays | | No Stays | |
| | <i>Mean</i> | <i>Std. Dev.</i> | <i>Mean</i> | <i>Std.Dev.</i> |
| Not True at All | .0874 | .2826 | .1639 | .3703 |
| Not True | .1768 | .3816 | .2512 | .4338 |
| True | .3654 | .4817 | .3288 | .4699 |
| Very True | .3704 | .4831 | .256 | .4365 |
| Observations | 1601 | | 2074 | |

Table 2: Self-Reported Promotion Chances at Job
By Mobility: 1996-2000

| Women | | | | |
|------------------|-------------|------------------|-------------|------------------|
| <i>Response</i> | Job Stays | | No Stays | |
| | <i>Mean</i> | <i>Std. Dev.</i> | <i>Mean</i> | <i>Std. Dev.</i> |
| Low Expectations | .4461 | .4972 | .4564 | .4983 |
| Observations | 2746 | | 1514 | |

| Men | | | | |
|------------------|-------------|------------------|-------------|------------------|
| <i>Response</i> | Job Stays | | No Stays | |
| | <i>Mean</i> | <i>Std. Dev.</i> | <i>Mean</i> | <i>Std. Dev.</i> |
| Low Expectations | .3864 | .4870 | .4058 | .4912 |
| Observations | 3305 | | 1863 | |

Note: The survey question was “Do you believe it is possible for you to get a promotion with this employer in the next two years?”. If the respondent replied “No”, this was coded as low chances of promotion.

Table 3: Descriptive Statistics - Entire Sample

| Variable | Total | | Women | | Men | |
|-----------------------------------|--------------|------------------|--------------|------------------|-------------|------------------|
| | <i>Mean</i> | <i>Std. Dev.</i> | <i>Mean</i> | <i>Std. Dev.</i> | <i>Mean</i> | <i>Std. Dev.</i> |
| Remained on job from t to $t+1$ | 0.5617 | 0.4962 | 0.5692 | 0.4952 | 0.5553 | 0.4970 |
| Age | 28.7269 | 8.1292 | 28.6096 | 8.1329 | 28.8277 | 8.1252 |
| AFQT | 44.4645 | 28.6104 | 43.8316 | 27.0915 | 45.0091 | 29.8462 |
| Education | 12.7589 | 2.1648 | 12.9290 | 2.0711 | 12.6126 | 2.2320 |
| Potential Experience | 10.9685 | 7.9043 | 10.6816 | 7.9769 | 11.2154 | 7.8334 |
| Low Expectations of Promotion | 0.4077 | 0.4914 | 0.4453 | 0.4970 | 0.3754 | 0.4843 |
| Log Hourly Wage | 2.0009 | 0.7648 | 1.8858 | 0.7188 | 2.0999 | 0.7890 |
| Non-White | 0.4284 | 0.4949 | 0.4352 | 0.4958 | 0.4226 | 0.4940 |
| In Metropolitan Statistical Area | 0.7994 | 0.4004 | 0.8066 | 0.3950 | 0.7932 | 0.4050 |
| Number of Children | 0.8238 | 1.1720 | 0.9137 | 1.1803 | 0.7464 | 1.1593 |
| Stayed Single | 0.4338 | 0.4956 | 0.4410 | 0.4965 | 0.4276 | 0.4948 |
| Stayed Married | 0.3745 | 0.4840 | 0.3595 | 0.4799 | 0.3873 | 0.4872 |
| Single-Married | 0.0549 | 0.2278 | 0.0579 | 0.2336 | 0.0523 | 0.2227 |
| Married-Single | 0.0218 | 0.1460 | 0.0252 | 0.1567 | 0.0188 | 0.1360 |
| Observations | 16394 | | 7582 | | 8812 | |

Table 4: Random Effects Probit Estimation
Staying on a Job

| | Coefficient | $\phi(\bar{X}\hat{\beta}) * \hat{\beta}_i$ | Coefficient | $\phi(\bar{X}\hat{\beta}) * \hat{\beta}_i$ | Coefficient | $\phi(\bar{X}\hat{\beta}) * \hat{\beta}_i$ |
|---|----------------------|--|----------------------|--|----------------------|--|
| In Metropolitan Statistical Area ^a | -.1251*** (.0309) | -.0499 | -.1251*** (.0309) | -.0499 | -.1223*** (.0309) | -.0485 |
| Number of Children | -.043*** (.0132) | -.0154 | -.043*** (.0132) | -.0154 | -.0429*** (.0132) | -.0153 |
| Education | .0206*** (.0079) | .0074 | .0206*** (.0079) | .0074 | .0213*** (.0079) | .0076 |
| AFQT | .0000 (.0006) | .0000 | .0000 (.0006) | .0000 | .0001 (.0006) | .0001 |
| Log Hourly Wage | .4119*** (.0256) | .1472 | .4119*** (.0256) | .1472 | .4104*** (.0256) | .1459 |
| Potential Experience | -.0219*** (.0081) | -.0000 | -.0218*** (.0081) | -.0000 | -.0562*** (.0124) | -.0031 |
| (Potential Experience) ² | .001*** (.0003) | | .001*** (.0003) | | .0022*** (.0005) | |
| Low Promotion Expectations ^a | -.2123*** (.0239) | -.0843 | -.211*** (.0328) | -.0838 | -.6628*** (.074) | |
| Female | .1548*** (.0261) | .0613 | .1559*** (.0325) | .0618 | .1138* (.0647) | |
| (Low Chances of Promotion)*Female | . | | -.0026 (.047) | -.0231 | .1825* (.1021) | |
| (Pot. Experience)*Female | . | | . | | .0162 (.017) | |
| (Pot. Experience) ² *Female | . | | . | | -.0007 (.0008) | |
| (Pot. Experience)*Low | . | | . | | .0988*** (.0181) | |
| (Pot. Experience) ² *Low | . | | . | | -.0034*** (.0008) | |
| (Pot. Experience)*Low*Female | . | | . | | -.0639** (.0262) | |
| (Pot. Experience) ² *Low*Female | . | | . | | .0029** (.0012) | |
| Stayed Married | .4807*** (.0321) | .1833 | .4808*** (.0321) | .1833 | .4821*** (.0321) | .1872 |
| Single-Married | .312*** (.0505) | .1219 | .312*** (.0505) | .1219 | .3024*** (.0506) | .1196 |
| Married-Single | .1831** (.0796) | .0724 | .1831** (.0796) | .0724 | .1821** (.0794) | .0725 |
| Non-White | -.0073 (.0295) | -.0029 | -.0073 (.0295) | -.0030 | .0035 (.0295) | .0014 |
| Constant | -.9031*** (.0817) | | -.9037*** (.0823) | | -.7655*** (.0873) | |
| Predicted Probability at \bar{X} | | .5118 | | .5116 | | .479 |
| Observations | | 16394 | | 16394 | | 16394 |
| ρ | | .2211 | | .2211 | | .2183 |
| Log-Likelihood | | -10365.49 | | -10365.49 | | -10326.6 |
| χ^2 statistic | | 1298.822 | | 1298.843 | | 1353.493 |
| Groups | | 7903 | | 7903 | | 7903 |

Standard errors are in the parentheses. ***, ** represent significance at the 90%, 95%, and 99% levels, respectively. For the continuous variables, the marginal effect reported is the mean of the marginal effects in the sample. In the case of dummy variables, the marginal effect is calculated as $\Phi(\bar{X}_{d=1}\hat{\beta}) - \Phi(\bar{X}_{d=0}\hat{\beta})$ where $d = 1$ and $d = 0$ represent the dummy variable set to 1 and 0, respectively.^a Individuals are classified as having low expectations if they thought a promotion was not likely in survey years 1979-1982 or they thought a promotion was not possible in the next 2 years in survey years 1996 or 1998.

Table 5: Marginal Effects

| Base Probabilities | | | |
|---------------------------|---------|--------|---------|
| <i>Experience Level</i> | -1 s.d. | mean | +1 s.d. |
| Men - Low | .403 | .47942 | .4927 |
| Men - High | .5586 | .47898 | .5092 |
| Women - Low | .4699 | .4916 | .556 |
| Women - High | .6193 | .5579 | .5659 |

| Low vs. High Promotion Expectations | | | |
|--|---------|--------|---------|
| <i>Experience Level</i> | -1 s.d. | mean | +1 s.d. |
| Women | -.1493 | -.0662 | -.0098 |
| Men | -.1555 | .0004 | -.0164 |

| Women vs. Men | | | |
|-------------------------|---------|-------|---------|
| <i>Experience Level</i> | -1 s.d. | mean | +1 s.d. |
| Low | .0669 | .0122 | .0633 |
| High | .0607 | .0789 | .0567 |

The marginal effects are calculated as $\Phi(\bar{X}_{d=1}\hat{\beta}) - \Phi(\bar{X}_{d=0}\hat{\beta})$ where $d = 1$ and $d = 0$ represent the set of dummy variables set to 1 and 0, respectively.